FORTY-SIXTH

ANNUAL REPORT

OF THE

Medical Officer of Health

OF THE

URBAN SANITARY AUTHORITY

OF

The City of Worcester,

YEAR 1919.

Deighton & Co., Printers, Worcester.

THE YEAR 1919.

	Birth-rate per 1000 Total Population.	Annual Death-rate per 1000 Civilian Population.							Rate per 1000 births.	
		All Causes.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhœa and Enteritis (under 2 years)	Total deaths under 1 year.
England and Wales...	18·5	13·8	0·01	0·00	0·10	0·03	0·07	0·13	9·59	89
96 great towns ..... (including London)	19·0	13·8	0·01	0·00	0·13	0·04	0·07	0·14	12·24	93
148 smaller towns ...	18·3	12·6	0·01	0·00	0·10	0·03	0·08	0·12	8·67	90
London	18·3	13·4	0·01	0·00	0·08	0·03	0·05	0·18	16·22	85
Worcester	**16·0**	**12·5**	**0·00**	**0·00**	**0·00**	**0·00**	**0·07**	**0·09**	**6·1**	**61**

TABLE II.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1919 AND TEN PREVIOUS YEARS.

Year.	Population estimated to middle of each year.	Births.			Total Deaths Registered in the District.		Transferable Deaths		Nett Deaths belonging to the District.			
		Un-corrected Number.	Nett.				of Non-Residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number	Rate.	Number *	Rate.			Number *	Rate per 1000 nett births	Number. *	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	47,749	1147	—	24·02	713	14·9	23	16	114	100	706	14·7
1910	47,885	1095	—	22·8	736	15·3	43	12	129	117	705	14·7
1911	48,021	1071	1073	22·3	737	15·3	35	27	108	100	729	15·2
1912	48,152	1009	1010	20·97	634	13·16	57	23	76	75	600	12·46
1913	48,287	930	930	19·25	711	14·72	54	29	83	89	686	14·2
1914	48,424	994	1000	20·6	732	15·11	28	24	88	88	728	15·03
1915	48,071	995	1000	20·16	699	14·09	30	31	83	83	700	14·11
1916	48,459	878	882	18·2	654	13·5	44	33	69	78·2	643	13·3
1917	50,000	771	773	15·46	692	13·84	69	54	50	64	677	13·54
1918	51,000	792	800	15·68	783	15·37	64	66	48	60	785	15·4
1919	**51,000**	**817**	**815**	**16·00**	**670**	**13·1**	**62**	**38**	**50**	**61**	**646**	**12·5**

* In Column 6 are to be included the whole of the deaths registered during the calendar year as having actually occurred within the district.

In Column 12 is to be entered the number in Column 6, corrected by subtraction of the number in Column 8 and by addition of the number in Column 9. Deaths in Column 10 are to be similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

Area of District in acres (exclusive of area covered by water) } 3662

Total population at all ages, including area added in 1914 49,158 } At Census of 1911.

Total families or separate occupiers 11,220

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TABLE III.

Infant Mortality 1919. Nett Deaths from stated Causes at various Ages under One Year of Age.

Cause of Death.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under One Year.
Small-pox	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	...	1	1	2
Diphtheria and Croup ...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	...	...	...	1	...	1	...	2
Tuberculous Meningitis ...	...	...	...	...	...	...	...	...	...	...
Abdominal Tuberculosis ...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...
Meningitis (*not Tuberculous*)	...	...	...	...	...	...	...	...	...	...
Convulsions	...	...	...	...	...	...	...	...	...	...
Laryngitis	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	1	...	1	1	2	...	...	4
Pneumonia (all forms) ...	...	1	...	...	1	5	3	3	...	12
Diarrhœa	...	...	...	...	...	...	...	...	...	...
Enteritis	...	...	...	...	...	1	2	...	...	3
Gastritis	...	...	...	...	...	1	...	...	...	1
Syphilis	...	1	...	...	1	...	...	...	...	1
Rickets	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying ...	...	...	...	...	...	...	...	1	...	1
Injury at Birth	1	...	...	...	1	...	...	...	...	1
Atelectasis	...	...	...	...	...	...	...	...	...	...
Congenital Malformations...	3	...	...	...	3	...	...	...	...	3
Premature Birth	7	1	4	...	12	1	...	...	...	13
Atrophy, Debility, and Marasmus	2	...	...	...	2	2	...	...	...	4
Other Causes	2	...	...	...	2	...	1	...	...	3
	15	3	5	...	23	12	8	6	1	50

Nett Births in the year { legitimate 815. illegitimate 48.

Nett Deaths in the year of { legitimate infants 47. illegitimate infants 3.

DEATHS REGISTERED FROM ALL CAUSES

DURING THE YEAR 1919.

NOTE.—The Deaths of Non-Residents occurring in Public Institutions situated in the District are excluded, and the Deaths of Residents occurring in Public Institutions situated beyond the limits of the District are included.

No.	Diseases.	Ages. 0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and over.	All Ages.
1	Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Measles	...	...	...	...	...	...	...	...	...	...	0	12	22	34
3	Whooping Cough	2	2	...	...	...	...	...	...	...	...	...	...	...	4
4	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Diphtheria	...	3	2	...	...	...	...	...	...	...	...	...	...	5
6	Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Paratyphoid Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Epidemic Influenza	2	4	...	3	1	2	9	3	3	4	3	3	...	37
10	Diarrhœa, Dysentery	...	1	...	...	...	...	...	...	...	...	1	...	...	2
11	Epidemic Enteritis	1	...	...	...	...	...	...	...	...	...	...	...	...	1
12	Asiatic Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	*Other Allied Diseases*	...	...	...	...	...	...	...	...	...	...	...	...	...	13
14	Cerebro-Spinal Fever	...	1	...	...	...	...	...	1	...	1	...	...	...	1
15	Encephalitis Lethargica	...	...	...	1	...	...	...	...	...	...	...	...	...	...
16	Puerperal Fever	...	...	...	...	1	...	...	...	...	...	...	...	...	1
17	Erysipelas	...	...	...	...	...	...	...	...	...	1	3	1	...	5
18	Pyæmia	...	...	...	...	...	...	...	...	0	...	1	0	...	2
19	Infective Endocarditis	...	...	...	...	...	...	...	1	...	...	...	...	...	1
20	Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Glanders	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Tetanus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Cowpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Syphilis	1	...	...	...	...	...	1	...	1	1	...	...	...	4
26	Gonorrhœa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Phagedæna	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	*Other Allied Diseases*	...	...	...	...	...	...	...	...	...	1	...	...	...	1
29	Malarial Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Rheumatic Fever	...	...	...	...	1	...	...	1	...	...	...	...	...	2
31	Rheumatism	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Tuberculosis of Brain	...	1	1	1	...	...	...	...	...	...	...	...	...	3
33	Tuberculosis of Larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Tuberculosis of Lungs	...	1	1	...	1	10	11	12	11	4	5	...	...	56
35	Tuberculosis of Abdomen	...	...	...	...	...	...	1	...	...	...	...	...	...	1
36	Tuberculosis of Bones and Joints	...	...	...	...	...	...	...	1	1	...	...	...	...	2
37	General Tuberculosis	...	...	...	2	...	...	1	...	...	...	...	...	...	3
38	*Other Infective Diseases*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	Thrush	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40	Actinomycosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
41	Hydatid Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	Cancer	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	*Diseases due to Altered Food*	...	...	1	...	...	...	...	...	...	...	...	...	...	1
44	Acute Alcoholism	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	Chronic Alcoholism	...	...	...	...	...	...	...	...	...	...	...	...	...	...
46	*Chronic Industrial Poisonings*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47	*Other Chronic Poisonings*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	Pyorrhœa Alveolaris	...	...	...	...	...	...	...	...	1	1	...	...	...	2
49	Osteo-arthritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Gout	...	1	...	...	...	1	...	8	6	18	13	10	2	59
51	Cancer	...	...	...	...	...	...	...	...	...	1	2	2	...	5
52	Diabetes Mellitus	...	...	...	...	1	...	...	...	...	...	...	...	...	1
53	Purpura Hæmorrhagica	...	...	...	...	...	...	...	...	...	...	...	...	...	...
54	Hæmophilia	...	...	...	...	...	...	...	...	...	...	...	...	...	1
55	Anæmia	...	...	...	...	...	...	1	...	...	1	...	...	...	2
56	Lymphadenoma	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57	Premature Birth	13	...	...	...	...	...	...	...	...	...	...	...	...	13
58	Injury at Birth	1	...	...	...	...	...	...	...	...	...	...	...	...	1
59	Debility at Birth	2	...	...	...	...	...	...	...	...	...	...	...	...	2
60	Atelectasis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	*Congenital Defects*	2	...	...	...	...	...	...	...	...	...	...	...	...	2
62	Inanition at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63	Want of Breast Milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...
64	Atrophy, Debility, Marasmus	3	...	...	...	...	...	...	...	...	...	...	...	...	3
65	Debilitation	...	...	...	...	...	...	...	...	...	...	...	...	...	...
66	Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...
67	Old Age, Senile Decay	...	...	...	...	...	...	...	...	...	...	9	42	27	78
68	Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...
69	Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
70	Encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
71	Apoplexy	...	...	...	...	...	...	...	2	2	9	7	14	2	36
72	Softening of Brain	...	...	...	...	1	...	...	...	...	2	3	2	...	8
73	Hemiplegia	...	...	...	...	...	...	...	...	...	...	1	...	...	1
74	General Paralysis of Insane	...	...	...	...	...	...	...	...	1	...	...	...	...	1
75	Other forms of Insanity	...	...	...	...	...	...	...	...	...	...	...	...	...	...
76	Chorea	...	...	...	...	...	...	...	...	...	...	...	...	...	...
77	Cerebral Tumour	...	...	...	...	1	...	...	1	...	1	...	...	...	3
78	Epilepsy	...	...	...	...	...	1	...	...	...	...	...	...	...	1
79	Laryngismus Stridulus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80	Locomotor Ataxy	...	...	...	...	...	...	...	...	...	1	...	...	...	1
81	Paraplegia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82	Spinal cord diseases	...	...	...	...	...	...	...	...	...	...	...	1	...	1
83	*Other forms Brain Disease*	...	...	...	...	...	...	...	...	...	...	...	...	...	1
84	Otitis	...	...	...	...	...	...	1	...	...	...	...	...	...	...
85	Disease of Nose, Epistaxis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
86	Diseases of Eye	...	...	...	...	...	...	...	...	...	...	...	...	...	1
87	Pericarditis	...	...	...	...	...	...	...	...	...	...	1	...	...	1
88	Endocarditis	...	...	...	1	1	1	4	3	15	15	20	14	2	85
89	Hypertrophy of Heart	...	...	...	...	...	...	...	...	...	2	1	...	...	3
90	Angina Pectoris	...	...	...	...	...	...	...	...	...	1	...	...	...	1
91	Aneurism	...	...	...	...	...	...	...	...	...	...	...	1	...	1
92	Senile Gangrene	...	...	...	...	...	...	...	...	...	...	1	2	...	3
93	Embolism, Thrombosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
94	Phlebitis	...	...	...	...	...	...	...	1	1	1	5	...	...	7
95	Arterio-Sclerosis	...	...	...	...	...	...	...	1	...	1	2	...	...	4
96	*Other Diseases Heart and Vessels*	...	...	...	...	...	...	1	...	...	...	1	...	...	2
97	Myocarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	2
98	Laryngitis	...	2	...	...	...	...	...	...	...	...	...	...	...	2
99	Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...
100	*Other Diseases larynx and Trachea*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
101	Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...
102	Acute Bronchitis	4	...	...	...	...	...	...	1	1	1	7	3	2	19
103	Chronic Bronchitis	...	...	...	...	...	...	...	1	3	5	10	18	2	45
104	Lobar Pneumonia	...	...	...	...	...	...	1	...	...	2	...	3	...	6
105	Lobular Pneumonia	11	5	1	...	...	...	...	1	2	2	5	5	...	32
106	Pneumonia	1	...	...	1	...	...	1	...	...	1	2	2	...	8
107	Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...
108	Pleurisy	...	...	...	...	...	...	...	...	...	1	...	...	...	1
109	*Other Diseases Respiratory System*	...	1	...	...	...	...	...	...	2	...	...	...	...	3
110	Ulceration of Mouth and Annexa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
111	Diseases of Pharynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...
112	Diseases of Œsophagus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
113	Ulcer of Stomach and Duodenum	...	...	...	...	...	...	...	...	1	1	...	...	...	2
114	Other Diseases of Stomach	1	...	...	...	...	...	...	...	...	...	...	...	...	1
115	Enteritis	2	...	...	...	...	...	...	...	...	...	...	...	...	2
116	Appendicitis	...	...	...	...	...	...	...	...	...	2	...	...	...	2
117	Obstruction of Intestine	1	...	...	...	...	...	...	...	2	1	...	1	1	6
118	Other Diseases of Intestine	...	...	...	...	...	...	...	...	...	...	...	...	...	...
119	Cirrhosis of Liver	...	...	...	...	...	...	...	...	3	2	...	...	...	5
120	Other Diseases of Liver	...	...	...	...	...	...	1	...	...	...	...	1	...	2
121	Peritonitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
122	*Other Diseases Digestive System*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
123	*Diseases Lymphatic System and Glands*	...	...	...	...	1	...	...	1	...	...	...	...	...	2
124	Acute Nephritis	...	...	1	...	...	...	...	...	...	...	...	...	...	1
125	Bright's Disease	...	...	...	...	...	...	...	...	7	5	6	2	...	20
126	Calculus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
127	Diseases of Bladder and Prostate	...	...	...	...	...	...	...	...	...	1	2	4	...	7
128	*Other Diseases Urinary System*	...	...	...	...	...	...	...	...	...	...	1	...	...	1
129	Diseases of Testis and Penis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
130	Diseases of Ovaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...
131	Diseases of Uterus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
132	Diseases of Breast	...	...	...	...	...	...	...	...	...	...	...	...	...	...
133	Abortion, Miscarriage	...	...	...	...	...	...	...	...	...	...	...	...	...	...
134	Puerperal Mania	...	...	...	...	...	...	...	...	...	...	...	...	...	...
135	Puerperal Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...
136	Placenta praevia, Flooding	...	...	...	...	...	...	...	...	...	...	...	1	...	1
137	Puerperal Thrombosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
138	*Other Diseases Pregnancy and Childbirth*	...	...	...	...	...	1	1	...	...	...	...	...	...	2
139	*Other Diseases Osseous System*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
140	Eczema	...	...	...	...	...	...	...	...	...	...	...	...	...	...
141	Pemphigus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
142	*Other Diseases Integumentary System*	...	...	...	...	...	...	...	...	...	...	1	...	...	1
143	In Mines and Quarries	...	...	...	...	...	...	...	...	...	...	...	...	...	...
144	From Wounds in War	...	...	...	...	...	...	...	...	...	...	...	...	...	...
145	*Accidents and Negligence.*														
146	In Vehicular Traffic	...	...	1	...	...	...	...	...	...	1	...	...	...	1
147	On Railways	...	...	...	...	2	...	...	...	...	1	...	...	...	3
148	In Building Operations	...	...	...	...	...	...	...	...	...	...	...	...	...	...
149	By Machinery	...	...	...	...	...	...	...	1	...	...	1	...	...	1
150	By Weapons and Implements	...	...	...	...	...	...	...	...	...	...	...	1	...	1
151	Burns and Scalds	...	2	...	...	...	...	...	...	...	...	...	...	1	3
152	Poisons, Poisonous Vapours	...	...	...	...	...	...	...	...	...	...	...	...	...	...
153	Surgical Narcosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
154	Effects of Electric Shock	...	...	...	...	...	...	...	...	...	...	...	...	...	...
155	Drowning	...	...	2	1	...	2	...	1	...	3	...	...	...	9
156	Suffocation, Overlaid in Bed	1	...	...	...	...	...	...	...	...	...	...	...	...	1
157	Falls	1	...	...	...	...	...	...	1	...	...	...	...	...	1
158	Homicide	1	...	...	...	...	...	...	...	...	...	...	...	...	1
159	*Suicide.*														
160	By Poison	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161	By Asphyxia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
162	By Hanging and Strangulation	...	...	...	...	...	...	...	...	...	...	...	...	...	...
163	By Drowning	...	...	...	...	...	...	...	...	...	1	...	...	...	1
164	By Shooting	...	...	...	...	...	...	...	...	1	...	...	...	...	1
165	By Cut or Stab	...	...	...	...	...	...	...	...	...	...	...	...	...	...
166	By Precipitation from Elevated Places	...	...	...	...	...	...	...	...	...	...	...	...	...	...
167	Execution	...	...	...	...	...	...	...	...	...	...	...	...	...	...
168	Sudden Death, cause not ascertained	...	...	...	...	...	...	...	...	...	...	...	...	...	...
169	Ill-defined and unspecified causes	1	...	...	...	...	...	...	...	...	...	...	1	...	1
	TOTALS	50	24	10	10	9	19	33	41	64	93	124	130	39	636

The Forty-Sixth Report of the Medical Officer of Health, being that for the year 1919.

To the Urban Sanitary Authority of the City and County of Worcester.

Mr. Mayor, Aldermen, and Councillors,

This Report which I have the honour to present differs in arrangement from those of previous years. This is in accordance with the wishes expressed by the Ministry of Health in a circular letter addressed to all Local Authorities, and accompanied by a memorandum which set out, in some detail, the information that should be included in the Report, and the order in which that information should be given. I have endeavoured to carry out these instructions.

The writing of the Report has been delayed by circumstances the Council are familiar with. Owing to the election of Dr. Marion Andrews as whole-time School Medical Officer, she ceased her work in the Health department at the end of September, 1919, and the whole work of that department

had to be carried on by myself, including the greatly developed scheme for Maternity and Child Welfare, and also that of Tuberculosis Officer and the care of the patients in the City Hospital. Your Council kindly allowed me assistance in the Tuberculosis work, and Dr. Neville Crowe has done the work at the Tuberculosis Clinics since the middle of October, 1919.

The work of the Maternity and Child Welfare has greatly developed during the year as a result of the sympathetic acceptance by the Council of the report sent them by the Health Committee in March, 1919. The results of this work are most satisfactory and encouraging. Only those who have intimate knowledge of the conditions under which a proportion of their fellow-citizens live and bring up their families can know the struggles and hardships that are endured. These fall largely on the mothers of the families, and whatever measures can be carried out to lessen these hardships will be to the advantage of the present and future generations. Most of the mothers are sincerely anxious to do the best for their children and are thankful for the advice and help which is tendered to them. It is a very few who are so little civilized as to be careless and neglectful.

The statistics of the year are favourable. The Table on page 52 gives the comparison of certain

death-rates with the rates for England and Wales, and with the 148 smaller towns among which Worcester is classed. The Table on page 53 shews the birth-rate, death-rate, and infant death-rate for 1919, and for the ten years preceding. The death-rate and infant death-rate were adversely affected by the epidemic of Influenza which occurred in March and April.

It will be noted that the work of the Sanitary Inspectors is incorporated in this Report by the wish of the Ministry of Health. Your chief Inspector (Mr. Ralph Taylor), has worked hard during the year, especially as regards the safeguarding of the food supply of the City.

The information concerning the Water Supply, Drainage and Sewerage, and the removal of House Refuse, was kindly supplied me by the City Engineer.

I am,

Your obedient Servant,

MABYN READ.

June 13th, 1920.

The City and County Borough of Worcester lies on both sides of the River Severn, extending from North to South for a distance of about three miles. On the West bank of the River the land rises to 100 feet above sea level, and the population of this area is about 8,500. On the East bank the land is undulating for about half-a-mile, and then the hills rise to 250 feet.

The industries carried on are very varied. There are large Engineering and Railway Signal Works, large Glove Factories, Tin Canister Works, Royal Porcelain Manufactory, Tanneries, and many others. There is nothing in these employments that has any marked influence on the health of the inhabitants, and the large variety of occupations tends to lessen the average of unemployment.

Population.—The census of 1911 showed the population of the City to be 47,987. The City boundary was extended in 1914, and 1171 persons were then added. It is very difficult to estimate the present population with any degree of accuracy, because of the considerable movement of persons into and out of the City that has occurred owing to War conditions, but it probably exceeds 51,000.

The Birth-rate for 1919 on this estimate was 16·0 per 1000 of the population. The Registrar-General has estimated the population as 49,336 for the purpose of calculating this rate, which would give a rate of 16·5 per 1000. This is a slightly higher rate than the rate for the

years 1918 and 1917, but lower than that for any year previous to 1917.

The Death-rate for the year was 12·5 per 1000, which is the lowest rate recorded, excepting that for 1912 when it was 12·46. The Registrar-General estimates "the death-rate population" at 47,361, which gives a rate of 13·4. This latter estimate excludes from the population all non-civilian males, and is based mainly on the rationing returns sent the Registrar-General by the Ministry of Food.

The Infant Death-rate, reckoned per 1000 of the births, was 61, which with the exception of the year 1918, when it was 60, is the lowest recorded. The epidemic of Influenza in the first Quarter of the year was the cause of many deaths of infants, and counterbalanced the very low infant death-rates of the other three quarters of the year.

There is no special feature of the year's statistics that requires comment, except the epidemic of Influenza in February and March. No less than 37 deaths were directly assigned to this cause. The epidemic was not so severe in type nor so widespread as that in 1918, when 151 deaths were caused, and there was not the lack of medical and nursing help that was so distressing a feature in the former year.

The Hospital accommodation of the district consists of (*a*) The General Infirmary, having 120 beds; (*b*) The Infirmary of the Worcester Guardians, having 84 sick beds for males, 76 for women, six for children, and four lying-in beds; (*c*) The City Hospital, having 50 beds for infectious disease, and 34 for Tuberculosis patients.

The General Infirmary has two wards closed (*i.e.*, 4 empty beds) for lack of funds to keep them open. This i most unfortunate, and a great hardship on many wh would be greatly benefitted by earlier treatment of thei illnesses than can under present conditions be obtained.

Water Supply.—This is taken from the River Sever The Works are on the East bank at the North end of th City. The water is pumped into tanks into which a portio of the sediment falls, and thence flows on to nine sa filters, which cover an area of 6301 square yards. The usu rate of filtration is from 2½ to 3 inches per hour.

The filtered water passes into a covered pure water tan and is pumped thence into the water mains. The supply constant and sufficient. There are two covered reservoi one on Rainbow Hill containing 812,000 gallons, the oth on Gorse Hill 250 feet above sea level containing 250,0 gallons. These reservoirs supply the houses in the high parts of the City, and being in connection with the lo lying mains are available in case of fire. There are water storage cisterns in the houses.

The Severn has a flow during ordinary weather of 4 million gallons per day. It is liable to floods after hea rain, and the water for a few days is turbid and contaminat by the washing out of the ditches and small streams th drain into it. The river flow may then be two or thr times greater than the ordinary flow.

Samples of water are taken weekly from the pure wa tank and bacteriological examinations are made, the mic organisms per cubic centimetre and Bacilli Coli per 1 cubic centimetres being recorded.

The results of the sand filtration were quite good through most of the year. When the temperature of the water is near freezing point, micro-organisms are found in the filtered water in increased numbers, and also Bacilli Coli. On six occasions the latter numbered more than five per 100 c.c. of the water, and on four of these dates in February) the River water was turbid and the temperature low. In 33 samples examined no Bacilli Coli were found in 100 c.c., a good proof of the excellency of the filtration.

Drainage and Sewerage.—All the houses are provided with water closets having flushing cisterns and connected with the sewers, with the following exceptions:—There are 26 privies and 55 pail closets, also 67 houses having water closets not connected with the City sewers. All these houses are in districts not yet sewered, as Tolladine Road, Astwood Road, Blackpole Road, and part of the Malvern Road area added to the City in 1914.

During the year, 24 houses in Claines which were added to the City in 1914, were connected with the City sewers. Fifty-two houses in this same area are as yet unprovided with flushing cisterns on the closets.

Serious nuisance has occurred from time to time in the Astwood and Blackpole Roads from overflow from cesspits of houses. There is no sewer into which these houses can drain, and although application for a loan for sewers in this district has been made to the Ministry of Health it has not yet been granted.

The Sewage Disposal Works are on the South-west side of the City, and the sewage is purified by the activated

sludge process, which has proved an efficient method of purification. The dry weather flow of the sewage is two million gallons daily, and at present three-quarters of a million gallons are being treated at these Works. An enquiry has been held by the Ministry of Health for the sanction of a loan to enlarge the Works, and treat the whole of the sewage by the method which has been found successful.

Removal of House Refuse.—House refuse is removed weekly by a staff of men, horses, and carts belonging to and in the employ of the Corporation. It is taken in the carts to various low-lying parts of the City and deposited, finally being covered with earth. In the winter time this method is mostly free from offence, but in hot weather, unless great care is taken unpleasant smells arise from the heap due to decay of the vegetable parts of the refuse. The road sweepings are generally added to these refuse heaps.

It cannot be said that this is an hygienic method of dealing with house refuse, and from time to time serious complaints have been received from citizens living in the neighbourhood of these "tips," complaints which were in most cases amply justified. The only proper way to dispose of this refuse is by a destructor, the provision of which it is hoped the Council will take into consideration when the present more urgent needs have been satisfied.

The Chief Sanitary Inspector reports that 79 sanitary ashbins have been provided during the year. Many of the receptacles used are insanitary, and should be replaced

by ashbins, with covers, of proper material and make. Before the War this provision was being made, but for a long time proper ashbins could not be obtained, and the price now is much greater than in 1914.

Sanitary Inspection of the District.

The Chief Sanitary Inspector has furnished the following information of the work done during the year.

Abatement of Nuisances.—There were 942 Preliminary Notices issued, and 377 Statutory Notices served by order of the Health Committee. These were complied with, but there was much delay in carrying out the requirements of the Health Committee owing to the scarcity of labour and of materials.

SUMMARY OF WORK DONE DURING 1919.

Number of Notices (Preliminary) issued	942
,, ,, (Statutory) ,, ...	377
,, Complaints received and investigated ...	352
,, Letters sent with regard to Notices, &c. ...	842
,, Notices sent to Schools *re* Infectious Disease...	171
Rooms cleansed and limewashed	557
Dilapidated walls, floors, windows, &c., repaired ...	151
Defective roofs and spouting repaired	255
Damp walls cured	[illegible]
Wash-houses repaired, cleansed and limewashed	[illegible]
,, floors and yards repaved and repaired	[illegible]
Glazed stoneware sinks fixed	[illegible]

Sink waste and rainwater pipes disconnected from drain...	34
Drains opened and cleansed	104
Defective drains repaired or reconstructed	82
Glazed stoneware gulley traps fixed	25
Water closets repaired, cleansed and limewashed... ...	59
„ flushing tanks repaired	241
„ provided with new basins and traps ...	41
Defective joints in pans, traps, and flush pipes repaired ...	33
Nuisances from overcrowding abated ...	2
„ „ improper keeping of animals ...	21
Accumulation of manure removed...	34
Houses provided with proper water supply ...	13
Sanitary dustbins provided	79
Miscellaneous	36
Waste of water reported to Water Inspector	32
Number of references to City Engineer with regard to dangerous buildings, paving of courts, and foul street gullies	35
Emptying of ashpits and dustbins referred to the Streets Superintendent	16
Rooms disinfected after infectious disease... ...	211
Samples of food and drugs collected for the City Analyst...	140
„ tap and well water „ „ „	9

It was necessary in five instances to take proceedings for failing to comply with Statutory Notices. One was for overcrowding, and four for insanitary houses which the owner had neglected to repair after repeated warnings. The work was carried out in accordance with the Magistrates' orders.

Elementary Schools.—These premises are all supplied with City water, and have W.C.'s with flushing tanks. The

School Medical Officer, Dr. Marion Andrews, reported a damp wall in a School caused by a defective water pipe, which was at once repaired.

Information concerning all cases of notifiable Infectious disease is at once forwarded to the School office, with the names of all children of School age in each house who are exposed to infection.

Closure of Schools for outbreaks of Infectious disease have been few during 1919. Three Infant Schools were closed for Influenza during March, and two Infant Schools for Whooping Cough in July. After any outbreak of Infectious disease the Inspectors disinfect the School premises.

Factory and Workshops Act.—There were at the end of the year 210 workshops on the Register. During the year three had been given up and 10 added. There were 47 bakehouses in use, and 22 not being used. In 1914 there were 71 occupied bakehouses. Many of the bakehouses now in use need substantial repairs; they are kept as clean as their structure will permit. The Inspectors paid 125 visits to these premises.

The following defects were found, and were remedied when the attention of the owner or occupier was called to them:—

Want of cleanliness	11
Defective sanitary accommodation	5
Defective drainage	4
Accumulation of refuse	3
Other defects	4

His Majesty's Inspector of Factories notified six cases of infringements of the Public Health Acts, all of which were at once dealt with.

Common Lodging Houses.—There were nine registered Common Lodging Houses at the end of the year, two having closed during 1919. The byelaws were complied with by the person registered. The houses are all old in structure, and not well adapted for the purpose. One hundred and twenty-six inspections of these houses were made during the year.

Houses let in Lodgings.—There are 11 of these premises, and the byelaws regulating them have been fairly well kept, but there have been too many persons occupying the rooms at times, caused by the acute shortage of houses in the City. The Inspectors paid 48 visits to these houses.

Offensive Trades.—The following is a list of these trades, all of which are subject to byelaws:—

Fish frying	25
Tripe boiling	5
Fellmongers	3
Hide, skin, and fat dealers	2
Gut scrapers	2
Rag and bone dealers	6

All the premises where these trades are carried on are periodically inspected, and were found to be kept in a satisfactory state, and the byelaws observed.

Slaughterhouses.—There are 31 registered Slaughterhouses in the City, eight of these were not used during the

year. Nearly the whole of the slaughtering of animals for food has been done at the Municipal abattoir.

The work of inspection of the carcases has been well and thoroughly done by your Chief Inspector, Mr. Ralph Taylor, who has given a great deal of time and energy to the work.

In a later paragraph it will be seen that the amount of unsound food condemned has been more than 20 tons, and the great increase, as compared with former years, has been due to the close inspection of the carcases of animals killed at the abattoir.

The number of animals slaughtered during the last three years is as follows:—

	Charges for Slaughtering	To March 31st 1918	1919	1920
Number of Beasts.....	1s.	902	1238	3336
,, Sheep	3d.	6071	14638	21115
,, Calves.....	6d.	180	1136	733
,, Pork Pigs .	6d.	1605	1338	892
,, Bacon Pigs	1s.	50	167	375
		8808	18517	26151

	1918 £	s.	d.	1919 £	s.	d.	1920 £	s.	d.
Amounts received for Slaughtering	168	12	3	316	4	6	475	2	3

Milk Supply.—The City lies in the midst of a fertile agricultural district, and the milk is brought direct from the surrounding farms and distributed to the households. The amount brought to the City by rail is [illegible] per cent

of the total consumption. There are in the City eight cow-keepers and 60 purveyors of milk. The Cowsheds Regulations are well kept generally: the periodic cleansing and limewashing of the cowsheds is carried out, but neither the cows nor the floors of the cowsheds are kept as clean as they should be, nor are the milkers' hands and clothing as cleanly as is necessary for this work.

The Inspectors paid 76 visits during the year to the Cowsheds, Dairies and Milkshops.

Under the Sales of Food and Drugs Act, 63 samples of milk were examined. Of these 58 proved to be genuine. The remaining five samples were dealt with as follows:—

Number of Samples.	Extent of Deficiency.	Result.
1	10·5 per cent. deficient in non-fatty solids	Fine £30 and £2 2s. 0d. Costs
1	18·3 per cent. deficient in fat	Fine £3
1	25 per cent. deficient in fat...	Warned by Health Committee
1	20 per cent. deficient in non-fatty solids	Case dismissed on question of warranty
1	22·3 per cent. deficient in non-fatty solids	Fine £10 and £1 1s. 0d. Costs

No samples of milk have been examined during the year for the detection of the Tubercle Bacillus, nor for contamination by dirt such as obtains access to the milk where the conditions relating to the milking and transport are insanitary or careless. Such conditions are by no means uncommon and are the result of either carelessness or ignorance in the persons handling the milk. Milk is the food of children and invalids, both classes being peculiarly

susceptible to those contaminations with which milk, when carelessly handled, is particularly liable.

It is most desirable and necessary that much more stringent measures should be taken to protect the public from contamination of this most essential food.

Milk and Cream Regulations, 1912 & 1917.—The Analyst has reported as follows on the samples submitted to him :—

1. Milk and Cream not sold as Preserved Cream :

	a. Number of samples examined for the presence of a preservative.	*b.* Number in which a preservative was reported to be present.
Milk	63	0
Cream	2	0

2. Cream sold as preserved Cream :

No sample was purchased during the year.

There was very little cream or preserved cream on sale during the year.

Milk (Mothers and Children) Order, 1918.—This Order was made in February, 1918, and was put in force very shortly after. Milk had been provided for mothers and children previous to this Order by the Worcester Infant Health Society so far as their funds would allow. The regulations regarding the supply of milk restricted it to "necessitous" cases, and the definition of this condition was left by the Local Government Board "to the discretion of the Local Authority."

The Ministry of Health in a Circular letter dated Octo-

ber 14th, 1919, pressed upon Local Authorities the importance of making full use of the powers which they possess under the Milk Orders and the Maternity and Child Welfare Act to secure that mothers and young children in their area are not deprived through the increase in price of the necessary supply, with the inevitable detrimental consequences to their health." In another paragraph of this Circular letter the Ministry of Health strongly urged that handbills should be distributed informing the public of the facilities that existed for obtaining a proper and sufficient supply of milk for expectant and nursing mothers and children under five years of age.

There were at once 5,000 leaflets distributed through the City by the help of the Health Visitors and through the Elementary Schools.

The working of this scheme was much facilitated by the possession by the Council of a well equipped Dairy, which was taken over by the Council in October, 1918, as mentioned in the Annual Report for that year. In that Report it was pointed out that the milk which this Dairy had been supplying in the City would in all probability have been sent elsewhere had the Dairy been closed, as would have happened if the Council had not purchased it.

The great increase in the number of children attending the Centres, and the opening of the Ante-natal Centre in May, caused a great demand for milk. Milk is always an expensive food, and the much higher prices that obtained owing to war conditions made it impossible for a large number of wage earning families to purchase it. The Health Visitors, by their work in the City for twelve year

past, have endeavoured to impress on the mothers the absolute necessity of milk as food when the breast feeding has ceased. The absence of milk from the diet of children between the age of nine months and five years has disastrous effects on the growth and development of the child, and is the chief cause of Rickets, defective and early decaying teeth, stunted growth, and a loss of power to resist the attacks of the infectious diseases to which at those ages they are especially liable.

Unsound Food.—During the year the following food has been destroyed as being diseased, unsound, or unwholesome:—

Article.	Cause of Condemnation.
Cattle.	
19 carcases and all organs ...	Generalised Tuberculosis
51 organs	Localised do.
68 heads and tongues	Do. do.
71 sets of lungs	Do. do.
17 livers	Do do.
Pigs.	
9 carcases and all organs ...	Generalised do.
28 heads and all organs	Localised do.
19 heads	Do. do.
Carcase and organs of 1 calf ...	Generalised do.
Cattle.	
8 carcases and organs	Emaciation due to Johnne's disease
6 ,, ,, ...	Hydremic Cachexia
1 carcase and organs	Leucocythaemia

Article.	Cause of Condemnation.
5 carcases and organs	Pyrexia
1 carcase and organs	Septic Peritonitis
1 ,, ,, ...	Septic Metritis
1 ,, ,, (bull) ...	Black Quarter
29 heads and tongues	Actinomycosis
All organs of 19 cattle, 354 livers, 142 lungs, 13 tripes ...	Locally diseased
Sheep.	
22 carcases and all organs ...	Hydremic Cachexia
4 ,, ,, ...	Asphyxia
2 ,, ,, ...	Pleurisy
2 ,, ,, ...	Peritonitis
3 ,, ,, ...	Natural death
497 livers, 307 lungs	Parasitic diseases
Pigs.	
7 carcases and organs	Rachitis, Emaciation
1 carcase and organs	Natural death
Calves.	
3 carcases and organs	White Scour
3 ,, ,, ...	Septic Arthritis
2 ,, ,, ...	Immaturity
866 lbs. of meat	Unwholesomeness due to injury during life
844 lbs. of frozen beef	Mouldy, decomposition
22 lbs. of bacon	Decomposition
546 lbs. of flour	Maggoty
15 boxes of kippers	Decomposition
2 barrels of herrings	Do.
280 lbs. of cod, hake	Do.

Article.	Cause of Condemnation.
414 lbs. of dates	
720 lbs. of tomatoes	Black spot
1 ton of potatoes	Frost bitten
3 cases of chickens	Decomposition
124 tins of condensed milk, fruit, fish, etc.	Do.

The total weight of food condemned was 20 tons 7 cwts. 2 qrs. 7½lbs. The whole of this food, with one exception, was voluntarily surrendered by the respective owners.

In 1918, 9½ tons were condemned; in 1917, 6¾ tons; and in 1916, 4 tons 4 cwt.

This great increase of meat that has been condemned has resulted from the examination of all carcases by a skilled Inspector; and the fact that his judgment was good and fair is shown by the voluntary surrender of the condemned meat.

Sale of Food and Drugs Acts.—The total number of samples submitted to the Analyst in 1919 was 140. Of these 92 were taken under the Sale of Food and Drugs Acts, and 48 were test samples.

Of the 92 samples taken under the Acts, 86 were certified to be genuine and six as adulterated; of the 48 test samples, 39 were certified to be genuine and nine as adulterated.

The following table shows the amount of adulterat during the past three years.

	1917		1918		1919	
	Formal	Informal	Formal	Informal	Formal	
Analyses	90	51	87	50	92	
Adulterated	15	3	9	2	6	
Adulterated per cent..	16·7	5·9	10·3	4·0	6·5	18
Amounts of Fines and Costs.....	£11 10s. 0d.		£60 3s. 0d.		£49 4s.	

Honey.—One sample of Honey taken under the Sale of Food and Drugs Act proved to be adulterated with 35 r cent. Commercial Glucose Syrup. The case was brou t before the Magistrates, but it was dismissed on the quest n of warranty.

List of Samples collected during the year.—

No. Exd.	No. Adulterated.	Article.	Formal. Genuine.	Formal. Adulterated.	Inform. Genuine.	Inform. Adulterated.
12	—	Butter ...	9	—	3	—
7	—	Coffee ...	3	—	4	—
2	—	Cheese	—	—	2	—
2	—	Cream	—	—	2	—
2	—	Castor Oil ...	—	—	2	—
1	—	Camphorated Oil ...	—	—	1	—
2	—	Dripping ...	2	—	—	—
6	1	Honey ...	4	1	—	1
2	—	Jam ...	1	—	1	—
4	—	Lard	2	—	2	—

86	14	Milk	58	5	14	*
5	—	Margarine	3	—	2	—
1	—	Marmalade	1	—	—	—
3	—	Pepper	2	—	1	—
2	—	Rice	1	—	1	—
1	—	Powder, Baking ...	—	—	1	—
2	—	Quinine, Ammoniated Tincture of ...	—	—	2	—
140	15		86	6	38	10

* Eight of these samples were taken direct from the cows and were below the standard laid down by the Board of Agriculture.

Prevalence of and control over Infectious Diseases.

Smallpox.—There has not been any case of Smallpox notified during the year.

The Smallpox Hospital in the Tolladine Road is always in readiness to receive patients.

Public Health (Smallpox Prevention) Regulations, 1917.—No primary vaccinations nor re-vaccinations have been performed by the Medical Officer of Health under these Regulations.

Scarlet Fever.—Only 26 cases were notified during the year. This is the fourth year in succession that the City has had less than 50 cases in the year. There has been no great prevalence of the disease since 1913. The type of the disease has been mild. No death has occurred.

Of the 26 cases, four were secondary. Twenty of th patients (77 per cent.) were removed to the City Hospit for isolation and treatment. There were no "return" case

Diphtheria.—There were 97 cases notified, 10 wer secondary cases. Twelve of the patients were treated a home, and 85 (87 per cent.) were removed to Hospita Two young children were admitted direct into the Gener Infirmary urgently needing tracheotomy, but the operatic did not succeed in saving their lives. There were thr other deaths from this disease, all in children.

There was an increase of this disease during 1919 compared with the four preceding years, and the disea was unduly prevalent in the Arboretum district and tl northern end of the City.

The medical men are making considerable use of tl bacteriological examination of swabs from persons cor plaining of sore throat. The cost of this is paid by tl City. The antitoxin of Diphtheria is supplied fre and can be obtained at any time, day or night. Patien are removed to Hospital, with few exceptions, on the san day that the notification is received, which is frequent done by telephone. In the case of patients who are goi to Hospital it is seldom that antitoxin is administere previous to admission. In a few instances medic practitioners have administered the antitoxin to membe of the family who have been exposed to infection.

Typhoid and Paratyphoid Fever.—Four cases of the diseases have been notified, three of the former (one co tracted elsewhere) and one of the latter. One case

Typhoid and the Paratyphoid case were treated at home one at the General Infirmary (removed there before notification), and one at Newtown Hospital. No defects of drainage at the homes of these persons were found.

All the patients recovered from their illness.

The average annual number of cases notified during the last seven years has been eight, whereas in the previous seven years (1905-11) the number was 23.

Acute Poliomyelitis.
Acute Polioencephalitis. } No cases of these diseases were reported during the year.

Cerebro-spinal Fever.—One case only was reported of this disease. The patient was a child 2½ years old. The meningococcus was found in cultures made from the spinal fluid. The child died. No spread of infection occurred, and swabs taken from the parents were "negative."

Encephalitis Lethargica.—Two cases of this disease were notified, and one, a girl aged 15, died. The other patient, a woman aged 41, recovered. There was no connection between the cases. Full clinical reports were sent to the Medical Officer of the Local Government Board at his request.

The Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations came into force on March 1st, 1919 and medical practitioners were called upon to notify all cases of the diseases mentioned in the regulations that came under their care.

Pneumonia, Acute Primary.—There were 20 cases notified during the year, and three of these died. The deaths registered from Lobar-Pneumonia were six, and those from Pneumonia eight. The 20 notified cases were distributed as follows:—nine in the month of March, six in the 2nd quarter, one in the 3rd, and four in the last quarter. The large proportion of cases in the month of March is probably due to two causes, one, that notification began on March 1st and cases were notified then that had been ill for some days previously, and secondly, that Influenza was epidemic at that time.

Acute Influenzal Pneumonia.—Forty-one cases were notified, 38 of which were reported in the month of March. There was in the first quarter of the year an epidemic of Influenza, and 31 deaths from Influenza were registered; during the second quarter only three deaths were registered. Pneumonia was stated to be a secondary cause of death in 16 of these cases. During the third and fourth quarters no cases were notified.

There was not the great scarcity of doctors and nurses during this epidemic as was so unfortunately the case in 1918.

Malaria.—During the year 28 ex-service men were notified by medical men as having had attacks of Malaria. The men were all written to and asked to come for an interview, and nearly everyone did so. All of them had been serving in the armies fighting in the East, and contracted the disease during the War. The men had all

been under treatment in Army hospitals, and the severity of the initial attack had been greatly modified.

Dysentery.—Two men were notified, both ex-service men, and were sent by their panel doctor to the Military Hospital at Norton. They were interviewed after their discharge from Hospital, and advised as to the precautions they should take against the spread of infection.

Hospital accommodation for Infectious Diseases is provided at the City Hospital, Newtown Road, and is ample for the needs of the City. It consists of separate blocks of buildings for Scarlet Fever, Diphtheria, and Typhoid Fever. A large proportion (80 per cent. to 90 per cent.) of the patients notified are removed there for isolation and treatment.

There are also attached to the Hospital pavilions for the hospital treatment of cases of Tuberculosis. Accommodation is provided for 13 men, 14 women, and seven children. There are also two small wards containing two beds each, where in cold weather the severe and feeble cases can be treated.

The chemical analyses and bacteriological work is done locally at the laboratories at the Shirehall. The City water is examined bacteriologically weekly, and at such other times as the City Engineer requires. All the analyses of food are done there, including some pathological bacteriological specimens from the abattoir.

A very large number of examinations (729) of swabs from sore throats were made, including all the cases of

Scarlet Fever admitted to the City Hospital, and the cases of Diphtheria previous to discharge.

During the year sputa from cases of suspected or notified cases of Tuberculosis were examined in 179 instances for the detection of the tubercle bacillus.

Tuberculosis.—The scheme for the prevention and treatment of this disease was approved by the City Council in the autumn of 1912, and at once accommodation for patients was provided in the Blocks of the City Hospital which were seldom used, and in Shelters erected in the grounds. Building was commenced in the Hospital grounds, the plans being approved by the Local Government Board. The pavilion for women and children was occupied on December 9th, 1914, and the men's pavilion on January 13th, 1915. These buildings, with five shelters adjoining, provide accommodation for 15 women, seven children, and 13 men. There have been reserved also ten beds at Knightwick Sanatorium—five for men and five for women.

This accommodation has been ample for the needs of the City, both for insured and non-insured persons, and for some cases of Non-pulmonary Tuberculosis. During 1919 the Local Government Board sanctioned the use of two small wards of two beds each, built in 1898 as isolation wards for doubtful cases of infectious disease, for very advanced cases which could not be treated in the open-air cubicles. These wards have been used for such cases since the beginning of April, 1919, and have been found very useful.

Non-pulmonary cases requiring surgical treatment are admitted into the wards of the Worcester General Infirmary, and payment is made by the City Council for their maintenance. Some of these patients who do not need active surgical treatment are admitted to Newtown Hospital for convalescence, and thereby receive much benefit.

The Medical Officer of Health is also the Tuberculosis Officer, and there is also a whole-time Nurse for this work. The Nurse visits the home of the person notified, and obtains certain facts which are entered on a record sheet. Subsequent visits are made to encourage the patient to carry out the advice given by the medical man in attendance, or by the Tuberculosis Officer if the patient is coming to the Dispensary. The Nurse also requests any "contacts" of the patient to come to the Dispensary for examination if not in good health, and if their doctor is willing for them to do so.

There were 119 persons notified during the year, 89 being Pulmonary, and 30 Non-pulmonary. Of the 89 Pulmonary cases, 45 were males (19 of these were ex-service men) and 44 were females. Of the 30 Non-pulmonary cases, 16 were males (four being ex-service men) and 14 were females.

Public Health (Tuberculosis) Regulations, 1912.

Summary of Notifications for the year 1919.

Ages.	No. of Notifications on Form "A". Primary Notifications.												Total Notifications on Form "A."	No. of Notifications on Form "B." Primary Notifications.				Total Notifications on Form "B."	No. of Notifications on Form "C."	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and up	Total.		Under 5	5 to 10	10 to 15	Total.		Poor Law Institutions.	Sanatoria.
Pulmonary.																				
Males	...	2	4	3	4	6	10	7	8	1	3	47	49	Children were sent for examination but none were notified.					2	49
Females	...	2	4	2	5	7	9	8	6	...	1	44	48						1	34
Non-Pulmonary.																				
Males	...	...	1	4	1	1	1	1	3	1	...	13	14						...	31
Females	...	1	1	2	3	2	4	2	...	...	...	15	16						...	15

Of these patients, 28 were admitted to Knightwick Sanatorium and 32 to Newtown Hospital.

Of the 119 patients, 23 died within twelve months of the time the notification was received. Ten of these died within one month, nine others within three months, four others within six months.

The Dispensary is open for three clinics each week. A total of 417 persons attended and 1631 attendances were made by them. Of these persons 92 were contacts many of them children who were kept under observation for many months; and 34 were sent by doctors for examination and report and were seen subsequently at intervals if the doctor so wished. Some of both these classes were sent to Knightwick or Newtown for a month's residence for observation.

Knightwick Sanatorium.—The City Council had eight reserved beds at this Institution. Thirty-one persons were treated there during the year. Of the 20 men admitted 15 were ex-service men.

Newtown Hospital.—There were 88 persons treated here during the year. Of these 38 were men and 17 boys under 12, and 21 women and 12 girls. Of the 38 men 23 were ex-service men. Several of the patients remained many months, and eight died there.

Never since the passing of the Insurance Act has there been any "waiting list" of persons who had been notified and who were willing to go to a residential institution and this statement applies to both insured and non-insured adults and their dependants.

Year after year a number of persons, about 20 per cent. of the cases notified, are in an advanced stage of the disease when they first come to the notice of the Local Authority, and all that can be done for them does not prevent a fatal result within a few months. The causes of this are various. If the patient is the breadwinner of the family, he or she struggles on to earn a living, and does not seek medical help in the early stages of the disease, even when they suspect what is amiss with their health. Unless some means can be arranged for the maintenance of the family in such cases this is likely to continue. When a person is suspected of the disease and is offered Sanatorium treatment, to be under observation for a short time, this offer is declined often because of the fear that residence in a Sanatorium will prevent their employment subsequent to the term of treatment. This fear of infection is greatly exaggerated by the general public. There is agreement on all hands that persons suffering from advanced disease are dangerous to others under the conditions that exist in many of the working class houses, and that the segregation of such individuals will certainly tend towards lessening the spread of the disease. If the community demands that such individuals must be segregated, the community must see also that the families of such individuals are adequately provided for when the patient is the breadwinner.

In Worcester no Care Committee has yet been set up. This step has been suggested year after year and the work of the campaign against Tuberculosis must be incomplete without it.

In the near future it is hoped that Colonies will be pro-

provided for a proportion of the patients who pass through our Sanatoria. Life in a Sanatorium is dull and monotonous. A Colony will provide work of varied kinds suitable to the individuals who are sent there. The period of residence will be much longer than ordinarily obtains in a Sanatorium, and some of the patients will be taught a trade better suited to their health than the one previously worked at, which indeed may have been harmful to them. Such Colonies can only be provided by the combined effort of several Local Authorities, except in the case of the largest Cities.

It will be noted in a preceding paragraph that 23 ex-service men were notified with Tuberculosis during the year, either direct from the Army Hospitals or from the local medical men. A number of other ex-service men have been referred to the Tuberculosis Officer for examination and report. Some of these patients have been difficult to classify, the hardships they had endured having induced a physical state similar to that produced in the early stages of Tuberculosis. A period of residence at a Sanatorium has been ordered for these men with satisfactory results, in many cases their health being restored so that they can return to their families and work.

Venereal Diseases.—The scheme for the free treatment of these diseases was prepared in 1917, and the Clinics at the General Infirmary began on July 1st of that year. It has not been found necessary to alter that scheme, and the facilities afforded seem adequate up to the present.

Patients are seen by the Medical Officer on Wednesday

(women) and Saturday (men) afternoons; and urgent case will be seen by the House Surgeon at any time. Patient also come at stated times for treatment by a nurse c orderly as directed by the Medical Officer of the Clinic.

The Clinics are open to all comers, and during the yea there were 426 persons seen and treated: for Syphilis 22, for Soft Chancre 2, for Gonorrhœa 104, for other conditior other than the above 96.

From the City population 37 males and 26 females wer dealt with for Syphilis for the first time, 33 males and thre females for Gonorrhœa. The total attendances of Cit patients were 553 for Syphilis and 880 for Gonorrhœa. is satisfactory that none of the patients ceased to atter the Clinic until their treatment was completed.

The "in-patient days" of treatment during the ye were 265 for cases of Syphilis, and 105 for cases Gonorrhœa.

Free supplies of Salvarsan substitutes were given to fi medical practitioners, all of them being members of tl honorary staff of the Worcester General Infirmary.

The pathological examinations are all made at a centr laboratory at Birmingham. The following number specimens were sent:—For the detection of Spirochet 22; of Gonococci, 80; for Wasserman re-actions, 118. these 30 were sent by medical practitioners.

No action has been taken during the year under t Venereal Diseases Act, 1917.

Handbills have been printed and sent to the Factor and Workshops, with a request to affix them where th

can be readily seen. These have also been placed in the Public Urinals in the City. The handbill stated the dangerous consequences of contracting these diseases, both to the individual, to innocent persons, and to the race, and stated the necessity for immediate treatment, and the facilities afforded at the General Infirmary.

Maternity and Child Welfare.

Midwives Act, 1902.—During the year 18 midwives all certified and trained notified their intention to practise in the City. Ten were in practise on their own account, and eight were on the staff of the County and City Nursing Institution which is a training school for midwives.

There were 813 births registered, and no less than 743 were on the books of the midwives. Of these 173 women had also engaged a medical man. The staff of the Nursing Institution and two private midwives attended 547 cases out of the total number.

The new Rules of the Central Midwives Board came into force March 25th, 1919. Copies of these Rules and an explanatory letter were sent to all the midwives on the Register. No infringement of the Rules has been discovered. The midwives, in accordance with these Rules, sent for a medical practitioner in 110 instances—in 82 it was for help at the confinement, and in 28 on account of the condition of the infant.

Notification of Births Act, 1907.—There were 839 live births notified under this Act for the year ending December 31st, 1919. Of these 570 were entered on the Register of the Health Visitors and were visited by them. Eleven of the infants born died before the first visit was paid on the eleventh day after birth.

Midwives Act, 1918.—This Act came into force on January 1st, 1919. By its provisions payments must be

made by the Local Supervising Authority to medical men for attendance on women at confinements, when the midwife in case of emergency as defined in the Rules of the Central Midwives Board calls in to her assistance a registered medical practitioner. The scale of fees was fixed by the Local Government Board.

Circular letters were sent to all the doctors and midwives early in January, informing them of the provisions of the Act which concerned them respectively.

During 1919 claims were received from medical men in 38 cases, the fees amounting to £66 14s. 0d. The Local Supervising Authority have the power to recover the fee from the patient, unless it is shown that she or her husband is unable to pay such fee. The sum of two guineas was recovered from patients.

The Maternity and Child Welfare Act, 1918.—This Act widens the powers of Local Authorities in the matter of Maternity and Child Welfare. It is concerned with the health of expectant mothers and nursing mothers, and of children under the age of five years who are not being educated in Schools recognised by the Board of Education.

A Memorandum (M. & C.W. 4) was issued by the Local Government Board, explaining how the Act should, in their opinion be viewed, and offering suggestions for its working. A report was prepared and was considered by the Maternity and Child Welfare Sub-Committee, revised by the Health Committee, and accepted by the City Council on March 4th, 1919.

The Council resolved that the following recommendations

should be acted upon as soon as possible :—

(1) *Midwives.*—To encourage competent Midwives the fee for attendance on patients shall be paid up to 15s. f each case, where the patient could not afford that sum. Tl Midwives claimed fees amounting to £18 5s. 0d. to the er of 1919, this sum being in respect of 33 cases.

The work of a Midwife is arduous and responsible, and performed with knowledge and skill is of the greatest bene to the community. The fees obtained are so small and tl work so hard that as a profession and means of livelihood is shunned by many who would do the work well. If t Maternity and Child Welfare Schemes are to be the succe that all desire and hope for, the status and remuneration the Midwives of the country must be improved. How i portant this work is in Worcester may be gauged by the fa that the Midwives attended 530 out of a total of 813 birt during 1919.

(2) It has not been possible to provide for the provisi for confinements away from home, in cases where the heal of the woman or the condition of her surroundings make desirable that she should be admitted to an institution f the confinement. Negotiations to take such patients ir the General Infirmary have been proceeding, but no agr ment has been come to so far.

(3) *Home Helps.*—The Council agreed to provide "hor helps" to women where, in the opinion of the Health Visito they were necessary. Since the middle of May "hor helps" have been provided in 32 cases, at a cost of £ The weekly sums paid in each case have varied with t amount of work done. The benefit to the mother and l young family while she is incapacitated has been great a has been much appreciated.

(4) *Dental treatment for Expectant and Nursing Mothers.*—The shocking condition of the teeth of many adults is well known to Medical men and to Dental Surgeons, and also the very serious effects that such a condition has on the individual's health. The public do not recognise the evils that follow on septic conditions in the mouth. This sepsis has a harmful effect on the expectant mother and nursing mother, and in the latter case causes a deterioration of the breast milk.

The Dental Surgeons agreed to treat these cases, and the Council in May approved of the scale of fees to be paid. There were 34 patients treated during the year, 12 for extractions only, 16 for extractions and new dentures, and six for dentures only. A sum of £227 was paid for this work, of which £53 was repaid by the patients.

(5) *Home Nursing* of cases of Puerperal Fever, Measles, Whooping Cough, Epidemic Diarrhœa, and Ophthalmia Neonatorum, is being carried out by the District Nurses attached to the County and City Nursing Institution, and is well done. The Council have agreed to pay an inclusive fee of £50 a year for this work.

Arrangements have been made also by which infants having severe ophthalmia may be treated for payment at the Ophthalmic Hospital, either as out-patients or as in-patients. Several cases have been treated at the out-patient room and attend there two or three times a day as the Ophthalmic Surgeon may order. The results have been uniformly good, in only one case was the sight of an eye lost.

(6) *Hospital treatment* for children under five years.—In this matter also negotiations with the Committee of the General Infirmary have not been concluded up to the present time. The limited accommodation (due to two Wards being

closed) and dearth of nurses are the reasons given why e Infirmary Committee have been unable to admit these ca s.

(7) *The Day Nursery* at 54, Lowesmoor, which was ope d in June, 1918, has been carried on successfully: e attendances have increased during the year and have reac d a daily average of from 20 to 25 (Saturdays excluded), ie highest number of children on any one day was 27. T re is accommodation for 30.

There has been no infectious disease among the chil en during the year.

The mothers who necessarily go from home to work nd maintain the family are very grateful for the care and a en-tion which is given to the children.

The total cost for the year was £711, and £165 as received from the parents or guardians of the children. he usual charge for maintenance is 10d. daily. This m be varied in accordance with the ability of the parents to p.

The Health Visitors visit the homes of new-born in nts on the eleventh day after birth and subsequently as ma be necessary. They make enquiries into many of the ill-births, of the deaths of infants, and immediate enq ies into cases of Ophthalmia Neonatorum, and such her diseases of young children as the Medical Officer ay direct.

The General Arrangements for attending to the l lth of expectant and nursing mothers and young childr are as follows:

There were for the first five months of 1919 two F alth Visitors, each taking one half the City.

At the beginning of May, the Worcester Infant Health Society, with the help of a grant of money from the American Red Cross Society, furnished a room over the Municipal Dairy in Broad Street as an Ante-natal Clinic. The Clinic was held weekly, and was attended by Dr. Marion Andrews until the beginning of October, at which time Dr. Andrews ceased to be Assistant Medical Officer and became whole-time School Medical Officer. During the last quarter of the year a lady doctor visited Worcester weekly, payments for her services being made by the Worcester Infant Health Society.

The Ante-natal Clinic.—For the seven months, May to December, 232 ante-natal cases were seen, and 435 attendances were made by them.

The work increased rapidly as the following figures show:—

	No. of Clinics.	New Patients.	Secondary visits by Patients.
May and June	6	42	18
Third Quarter	9	56	42
Fourth Quarter	13	134	143

At the end of the year there were 78 expectant mothers having milk supplied to them free or at less than cost price.

It was necessary on May 1st to obtain the services of another Health Visitor. One half of her salary was paid by the Infant Health Society for the ante-natal work, and the City Council paid one half for her visits to the homes of expecting home helps, for visiting the Day Nursery and

the homes of the children admitted there, and for assisting at the Clinics and in the work generally.

Maternity and Child Welfare Clinics.—For the first quarter of the year four Clinics were held weekly—two at the Dispensary Buildings in Bank Street, one at St. Paul's, and one at St. Clement's. Dr. Andrews found this was more than she could do, and the Clinics at St. Paul's and St. Clement's were discontinued at the end of March.

The attendances of mothers and children at these Clinics have been increasing monthly.

	Bank Street. Wednesday.	St. Paul's.* Thursday.	Bank Street. Friday.	St. Clement's.* Tuesday.	Total.
No. of days Clinic was held ...	49	11	49	11	120
No. of new attendances, children ...	261	21	226	19	517
No. of return attendances, children ...	2481	260	2916	161	5888
Post-natal attendances	504	60	270	35	869

* These Clinics were only during the first quarter of 1919.

It will be seen that the average attendance at each Clinic was over 50, a number that could not be attended to adequately at the Bank Street premises. Early in 1920 four Clinics a week have been resumed.

All this work for Child Welfare has been developing in

Worcester during the last twelve years, since the Worcester Infant Health Society first began its work in 1907. The great stimulus given to the work since the termination of the War has come from the lamentable facts disclosed respecting the physical condition of the men when medically examined for the Army.

It has become certain that if this degeneracy is to be checked and a healthy race produced, great efforts must be made and the child cared for before being born. From this point of view the Ante-natal Clinic is most important, and feeding the expectant mothers who need food is the best way to ensure healthy babies.

The infant death-rate, reckoned on per 1000 births, was during the early part of this century a disgrace to our City. It has year by year inproved since 1903, with occasional relapses. The chart here given is a record of progress of which the City may well feel proud and which should stimulate to further efforts.

INFANT DEATH-RATES PER 1000 BIRTHS.
Year—
160
150
140
130
120
110
100
90
80
70
60
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920

Attention may be called to the Table at the end of this Report shewing the causes of death of the 50 infants who died under 12 months of age. It will be noted that nearly one-third died during the first week of life, and nearly one-half during the first month. To remedy this lamentable loss of life the expectant mother must come under treatment for months before the baby is born. In the short experience of the working of the Ante-natal Clinic this has been well proved, and the Health Visitors bear ample testimony to the value that the care of the expectant mothers has on the health of the babies that have been born.

The epidemic of Influenza during the first three months of the year was probably the cause of the larger number of deaths from acute lung disease in infants. The proportion of deaths from acute lung disease to the total deaths of infants during 1919 was considerably in excess of the proportion in recent years.

Stillbirths and Infants deaths were enquired into in many cases, but the changes of staff and the pressure of work caused by the provision of milk have prevented the returns being completed.

There were 43 stillbirths reported, the causes assigned were very various. In nearly every case a doctor attended the mother.

Incidence of the diseases that occur among the women and young children.

(1) **Puerperal Fever.**—Five cases were reported during the year, one being in the Ward of the Workhouse. All

the patients recovered. The Midwives in attendance kept the rules of the Midwives Board so far as could be ascertained.

(2) **Ophthalmia Neonatorum.**—Twenty cases were notified. All the patients were promptly treated, in some cases the Midwife or Nurse sent the baby to the Ophthalmic Hospital when the eye discharge was first seen. One child lost the sight of one eye, all the other patients recovered without damage to the eyesight.

(3) **Measles and Rubella** were notified in 41 persons only during the year, there being 31 of the former and 10 of the latter. No death was registered from either of these diseases.

The Nurses from the Nursing Institution visited and nursed the serious cases, and their help was most valuable.

(4) **Whooping Cough.**—There were four deaths registered from this disease, all under five years of age. The children all had medical attendance and nursing.

(5) **Epidemic Diarrhœa.**—There was very little diarrhœa during the year. Only four deaths were assigned to this cause, three were in children under one year of age.

(6) **Epidemic Influenza.**—This disease was very prevalent during the first three months of the year, causing no less than 37 deaths. Six of these deaths were in children under five years of age. The influence of the disease shewed itself also in the large number (21) of *children's* deaths that were registered from diseases of the lungs. Of

these 21 deaths, no less than 16 were in infants under one year of age, and 14 of these 16 deaths occurred during the first quarter of the year.

Housing.

It is agreed that the housing problem is, at the present time, most urgent and important, having regard to the moral and physical welfare of the community; also that it is beset with great difficulties, which are known to all and especially to those who are endeavouring to solve the problem.

During the War there was no building of houses, and very little work was done by the Health Committee under the Housing Acts. Houses that needed repairs were dealt with by notices served under the sections of the Public Health Acts.

In the Annual Report for 1914 it was stated that there were 160 working-class houses vacant in December of that year. During 1919 there were no houses of this description vacant and there was a great and increasing demand for houses.

(1) **General Housing conditions in the City.**—The number of dwelling-houses in the City is about 11,130. Of these about 9,000 are houses rented by the working classes. No houses were built during 1919. It is very difficult to estimate the population of the City, it is probably between 51,000 and 52,000. Factories are being built in and near

the City that will employ a number of persons when in working, and this will cause some extra demand for housing accommodation. The shortage of houses is at the present time acute. The Housing Committee of the City Council has been engaged for many months in dealing with this matter.

There has been purchased three excellent sites on which to build, and plans have been prepared and approved for the erection of 357 houses on these sites.

(2) **Overcrowding.**—For the purpose of the Housing Survey a few representative streets were visited from house to house, and very little overcrowding (*i.e.*, more than two adults to one room) was discovered.

In one large block of buildings, which consists of small flats, there were cases of overcrowding found.

One prosecution was ordered by the Health Committee after repeated warnings had been given, and the overcrowding was abated.

(3) **Fitness of Houses.**—An ancient City such as Worcester, the central part of which was once enclosed by walls, would be likely to have a considerable number of houses so constructed and arranged as not to come up to any good standard of housing. The worst of these, more than 250, have been demolished during the last 10 years. The defects found are being back-to-back or having no through ventilation, insufficient and improperly situated sanitary accommodation, being crowded together preventing free access of light and air, and general internal defects such as inadequate cooking apparatus, absence of larder and cupboards, and frequently no wash-house nor water supply

within a reasonable distance. The City Council on December 2nd, 1919, passed the following resolution :—

That whilst this Council are of opinion and direct that the case of every house coming before the Health Committee for consideration of the accommodation, and especially sanitary conveniences, should be dealt with upon its merits, they lay down for the Committee's guidance a standard of the sanitary conveniences which should, in ordinary cases, be provided as regards existing houses, viz. :—

A scullery and sink for every house,
A separate w.c. for every house,
A separate wash-house for every three houses.

In each of these conveniences a water supply and proper drainage is to be provided.

This resolution has been of the greatest assistance to the Health Committee when dealing with owners who think that what is is good enough.

The Health Committee has visited and dealt with a large number of houses In February 20 houses in Pheasant Street were represented as being unfit for habitation. After full consideration the Committee decided to deal with the defects under the Public Health Acts, and the houses have been greatly improved and additional sanitary accommodation and wash-houses erected.

Experience shewed that the Housing Acts could seldom be made use of, as under the present conditions the tenants could not be removed nor could they find any other housing accommodation.

The difficulties of remedying the defects in houses were due to the lack of labour, and of materials, and the unwill-

ingness of builders to give tenders as they could not foresee the cost of either of the above essentials from month to month.

(4) **Unhealthy areas.**—No areas have been represented as unhealthy areas previous to 1919 nor during the year. It does not seem possible until houses are being built in considerable numbers to carry through any scheme with regard to unhealthy areas.

(5) **The Bye-laws** relating to the building of new houses have been under revision for a long time. When the pressure of work caused by War conditions is relieved it is to be hoped that this revision will be carried through.

The Bye-laws relating to Common Lodging Houses were made by the Council in 1892, and those relating to Houses let-in-lodgings in 1910. They are sufficient under existing conditions.

(6) **Statistics for the year 1919:**—

1. Complaints have been received during the year from a Union of Householders in respect of certain groups of houses, the total number of such houses being 142. The Health Committee has visited these houses and action has been taken respecting them. The owners of some of these houses were very dilatory in taking the steps necessary to put them in order, and the Health Committee ordered prosecutions with the result that the work ordered by the Committee was done.

In one block of houses representations were made and action was taken as detailed below. (See 4).

2. Action under Section 17 of the Housing Act of 1909

(*a*) Two hundred and forty-four houses were inspected and scheduled under this section.

(*b*) Fifty-eight of these houses were considered unfit for human habitation. Of these 28 were made fit during 1919, so far as could be done without removing the tenants. The remaining 30 were all back-to-back houses. Notices have been served on the owners under the Public Health Acts, but in all these cases no great improvements can be effected without removing some of the tenants, so that two houses can be converted into one house.

(*c*) In the remaining houses (186) such repairs as were necessary have been ordered and, in most cases, have been carried out.

3. Housing Act, 1919, Section 28.—No orders were made under this Section, but at the December Meeting of the Council the following resolution was carried :—

"That the Council resolve to act upon Section 28 of the Housing Act, 1919, relating to the steps to be taken to require owners to put their working-class houses in a state in all respects reasonably fit for human habitation, and authorise the Health Committee to exercise the Council's powers under that Section, and to have power from time to time to incur an outlay not exceeding at any one time the sum of £1,000 in carrying out work to working-class houses which the owners were liable for but failed to do, the Committee being authorised to require the owners to repay all sums so expended with interest at 5 per cent. per annum, either in one sum or by monthly or annual instalments as the Committee may think best in each case."

4. Closing Orders.—Representations were made in respect of 20 houses during the year, but no closing orders

were made. The Health Committee, after full consideration, determined to deal with these houses under the sections of the Public Health Acts, and such work as is possible under present conditions has been done.

5. No demolition orders were made during the year.

6. No dwelling houses were demolished voluntarily.

7. Obstructive Buildings—No representations were made respecting such buildings.

8. There is no member of the Health Staff whose sole work is connected with housing. The Chief Inspector and one Assistant Inspector give part of their time to these duties (Another Inspector was appointed in May, 1920, who will also take part in this work).